



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,661	08/09/2007	Ken Kato	MUR-050-USA-PCT	1645
27955	7590	04/09/2009	EXAMINER	
TOWNSEND & BANTA c/o PORTFOLIO IP PO BOX 52050 MINNEAPOLIS, MN 55402			KENNEDY, NICOLETTA	
			ART UNIT	PAPER NUMBER
			4131	
			MAIL DATE	DELIVERY MODE
			04/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,661	Applicant(s) KATO ET AL.	
	Examiner NICOLETTA KENNEDY	Art Unit 4131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 1-4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/31/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Greff et al. (New Cosmetic Compositions Containing Sphingomyelins and Other Complex Lipids, FR 2692781, as per the certified English translation. Both the English translation and underlying French document have been included in the file). The claim is directed to a composition containing a sphingomyelin as an effective ingredient.

3. Greff teaches cosmetic compositions containing sphingomyelins from fat globules of milk as precursors of ceramide (page 4). Cream A, which comprises milk fat globule lipids, which contain between 5 and 35 % sphingomyelin (pages 4-5) was used on 20 volunteers for 3 weeks. The volunteers saw improved skin state, including faded wrinkles, less dry and less stretched skin. Wrinkles and stretched skin result from aging and photoaging. This disclosure anticipates claim 1.

The claims are directed to a composition containing a sphingomyelin where the sphingomyelin is derived from cow milk. Greff teaches utilizing natural lipids, including

Art Unit: 4131

sphingomyelin, from cow's milk. The lipids come from a harmless source, are extractable at reasonable cost, and contain a high proportion of phospholipids (30-50%) (page 3). This disclosure anticipates claims 2.

4. Claim 2 is also rejected under 35 U.S.C. 102(e) as being anticipated by Kanamaru et al. (US 2006/0240115 A1).

Kanamaru et al. teaches a method of deriving the phospholipid contents from normal cow milk (p. 4, paras. 42-43) and a method of measuring said phospholipid contents, including sphingomyelin (p. 4, para. 44).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

Art Unit: 4131

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Msika et al. (US 7,511,010 B2) in view of Nieuwenhuizen (US 2006/0134182 A1). Msika et al. teach a PKC inhibiting compound, including sphingomyelin, that can be ingested orally and that is intended for the treatment and prevention of sensitive/reactive skin (column 5, lines 48-55; column 13, lines 1-13 and 56-58). Msika et al. differ from the claimed invention because they do not specifically teach a food or feed; they teach an oral composition.

Nieuwenhuizen teaches a food comprising a sphingolipid, including sphingomyelin (para. 17). Msika et al. disclose an orally administered composition containing sphingomyelin that improves skin and Nieuwenhuizen discloses a food comprising sphingomyelin. A person of ordinary skill in the art would have been motivated to combine these references with a reasonable degree of success because they are in analogous arts and each discloses oral uses of sphingolipids, including sphingomyelin.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nieuwenhuizen (US 2006/0134182 A1) read in light of Greff et al. (FR 2692781). Greff et al. is cited and applied as used in the 102(b) rejection cited above. Nieuwenhuizen

Art Unit: 4131

teaches a food comprising a sphingolipid, including sphingomyelin (para. 17) but does not teach a skin beautifying effect from such food. Greff teaches a skin beautifying composition utilizing natural lipids, including sphingomyelin, from cow's milk. The lipids come from a harmless source, are extractable at reasonable cost, and contain a high proportion of phospholipids (30-50%) (page 3). Greff et al. however, does not teach sphingomyelin in a food or feed.

A person of ordinary skill in the art would have been motivated to combine these references with a reasonable degree of success because they are in analogous arts and each discloses a use for sphingomyelin but through a different method of delivery for that use (topical and oral through feed).

Priority

10. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Conclusion

No claims are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLETTA KENNEDY whose telephone number is (571)270-1343. The examiner can normally be reached on Monday through Friday 7:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4131

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/James O. Wilson/
Supervisory Patent Examiner, Art Unit 1624**

**/NICOLETTA KENNEDY/
Patent Examiner, Art Unit 4131**